

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	("5,737160").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/09/19 13:12
S2	2	("6157089").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/09/19 14:52
S3	2	("5969514").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/09/19 14:53
S4	40070	(short adj circuit or over adj load or over adj current or excessive\$3 adj current) same protect\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:53
S5	63	S4 same (fet or mosfet or gate or transistor\$1) same parallel same (aux or auxiliary)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:37
S6	14	S4 same (fet or mosfet or gate or transistor\$1) near3 (aux or auxiliary) same parallel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:03
S7	27	S4 same (fet or mosfet or gate or transistor\$1) near3 (aux or auxiliary or bypass) same parallel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:06
S8	13	S7 not S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:06
S9	7918	S4 same (fet or mosfet or gate or transistor\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:05
S10	127	S4 same (fet or mosfet or gate or transistor\$1 or switch) near3 (aux or auxiliary or bypass) same parallel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:17
S11	113	S10 not S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:07
S12	100	S11 not S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:14

## EAST Search History

S13	5	"3432680"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:15
S14	0	wilfried-gehl.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:15
S15	2	gehl-wilfried.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:15
S16	1646	((fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel) same (simultan\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:06
S17	111	S16 and (short adj circuit or over adj load or over adj current or excessive\$3 adj current or short\$3) same protect\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:31
S18	168395	monit\$4 same (semiconductor or switch\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:35
S19	24218	S18 same (over adj load or over adj current or short\$3 or excessive\$ adj current or excessive\$3 adj voltage or limit\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:35
S20	11	S19 same ((fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel) same (simultan\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:36
S21	33215	monit\$4 near3 (semiconductor or switch\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:35
S22	93578	monit\$4 with (semiconductor or switch\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:35
S23	3395	S21 same (over adj load or over adj current or short\$3 or excessive\$ adj current or excessive\$3 adj voltage or limit\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:05
S24	1	S23 same ((fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel) same (simultan\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:37

## EAST Search History

S25	105725	(fet or mosfet or gate or transistor\$1 or switch\$3) with (aux or auxiliary or bypass)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:39
S26	390	(fet or mosfet or gate or transistor\$1 or switch\$3) with (overload or overcurrent or short\$3 or excessive adj current or excessive adj voltage) same (aux or auxiliary or bypass) same simultan\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:41
S27	65	(fet or mosfet or gate or transistor\$1 or switch\$3) with (overload or overcurrent or short\$3 or excessive adj current or excessive adj voltage) same ((aux or auxiliary or bypass) near (switch or transistor or gate or fet)) same simultan\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:49
S28	18	(monitor\$3 with (fet or mosfet or gate or transistor\$1 or switch\$3)) near ((aux or auxiliary or bypass) near (switch or transistor or gate or fet or mofet))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:52
S29	680	(monitor\$3 with (fet or mosfet or gate or transistor\$1 or switch\$3)) same ((aux or auxiliary or bypass) near2 (switch or transistor or gate or fet or mofet))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 15:53
S30	127	S29 and (short adj circuit or over adj load or over adj current or excessive\$3 adj current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:03
S31	59144	fail\$3 with (switch or transistor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:05
S32	14994	S31 same (over adj load or over adj current or short\$3 or excessive\$ adj current or excessive\$3 adj voltage or limit\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:05
S33	34	S32 same ((fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel) same (simultan\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:20
S34	31	"3515773"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:10
S35	1	"03737791"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:11
S36	7	"3737791"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:11

## EAST Search History

S37	5199	(fail\$3 with (transistor or switch)) same monitor\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:12
S38	66	(fail\$3 with (transistor or switch)) same monitor\$3 same simultan\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:15
S39	126764	((igfet or n adj1 fet or fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:24
S40	5762	electronic with fuse	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:23
S41	26	S40 same ((igfet or n adj1 fet or fet or mosfet or gate or transistor\$1 or switch\$3) near3 parallel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:25
S42	0	S40 same (igfet or n adj1 fet or fet or mosfet or gate or transistor\$1 or switch\$3) same simultan\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:25
S43	10	S40 same (igfet or n adj1 fet or fet or mosfet or gate or transistor\$1 or switch\$3) same simultan\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:26
S44	5	"3432680"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:27
S45	0	pepper adj2 fuchs.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:44
S46	241	pepperl adj2 fuchs.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:44
S47	4	pepperl adj2 fuchs.as. and monitoring adj (unit or circuit)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:52
S48	170	((watch adj dog or monitor\$3) near (unit or circuit)) same (switch\$2) same (simultan\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 16:54

## EAST Search History

S49	90	((watch adj dog or monitor\$3) near (unit or circuit)) same (switch\$2) same (simultan\$5) and (over adj load or short\$3 or over adj current or excess\$4 adj current or excess\$4 adj voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 17:21
S50	0	("5894274").URPN.	USPAT	OR	ON	2006/09/19 16:59
S51	0	("5894274").URPN.	USPAT	OR	ON	2006/09/19 16:59
S52	0	("5894274").URPN.	USPAT	OR	ON	2006/09/19 16:59
S53	2	("4862091"   "4977478").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 16:59
S54	31	((watch adj dog or monitor\$3) near (unit or circuit)) same (switch\$2) same (simultan\$5) same (over adj load or short\$3 or over adj current or excess\$4 adj current or excess\$4 adj voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 17:22
S55	9	((watch adj dog or monitor\$3) near (unit or circuit)) same (gate) same (simultan\$5) same (over adj load or short\$3 or over adj current or excess\$4 adj current or excess\$4 adj voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 17:26
S56	9	((watch adj dog or monitor\$3) near (unit or circuit)) same (gate) same (simultan\$5) same (over adj load or short\$3 or over adj current or excess\$4 adj current or excess\$4 adj voltagea or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 18:55
S57	12958	(watch adj dog or monitor\$3) same (switch\$2 or fet or mosfet or gate) same (over adj load or short\$3 or over adj current or excess\$4 adj current or excess\$4 adj voltagea or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 18:58
S58	12958	(watch adj dog or monitor\$3) same (switch\$2 or fet or mosfet or gate) same (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:00
S59	706	(watch adj dog or monitor\$3) same (switch\$2 or fet or mosfet or gate) same (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current) same (aux or auxiliary or bypass)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:00
S60	40	(watch adj dog or monitor\$3) same (switch\$2 or fet or mosfet or gate) same (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current) same ((aux or auxiliary or bypass) adj switch)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:08
S61	453	(watch adj dog or monitor\$3 or cpu or micro\$computer or micro\$processor or micro\$controller or processor) same (switch\$2 or fet or mosfet or gate) same ((aux or auxiliary or bypass) adj switch) and (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:09
S62	10	(watch adj dog or monitor\$3 or cpu or micro\$computer or micro\$processor or micro\$controller or processor) same (switch\$2 or fet or mosfet or gate) same ((aux or auxiliary or bypass) adj switch) near4 (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:28
S63	1328	((watch adj dog or monitor\$3 or cpu or micro\$computer or micro\$processor or micro\$controller or processor) with (switch\$2 or fet or mosfet or gate) same (aux or auxiliary or bypass or parallel) same (over adj load or short\$3 or over adj current or excess\$4 adj current or exceed\$4 adj5 current)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:32

## EAST Search History

S64	398	S63 and resistor with series	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/19 19:32
S65	1	("6710698").URPN.	USPAT	OR	ON	2006/09/19 19:58
S66	0	("6781502").URPN.	USPAT	OR	ON	2006/09/19 20:34
S67	0	("6781502").URPN.	USPAT	OR	ON	2006/09/19 20:34
S68	88	("3074006"   "3078410"   "3109980"   "3192441"   "3201606"   "3317817"   "3337744"   "3395317"   "3403320"   "3413522"   "3448342"   "3473106"   "3505583"   "3509450"   "3531712"   "3532936"   "3534249"   "3541425"   "3548294"   "3571608"   "3588672"   "3668545"   "3697861"   "3771021"   "3819986"   "3881150"   "3886410"   "3916220"   "4016460"   "4075546"   "4186418"   "4423431"   "4429339"   "4459537"   "4536699"   "4618812"   "4661879"   "4691129"   "4725912"   "4736268"   "4752852"   "4835649"   "5006734"   "5015918"   "5136452"   "5233287"   "5319515"   "5381296"   "5410441"   "5430401"   "5506493"   "5513060"   "5519557"   "5539603"   "5539610"   "5625519"   "5642251"   "5757600"   "5814979"   "5815356"   "5946270"   "5991134"   "6118641"   "6424512"   "6456186"   "6587027"   "6611410"   "6710698").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 20:34
S69	88	("3074006"   "3078410"   "3109980"   "3192441"   "3201606"   "3317817"   "3337744"   "3395317"   "3403320"   "3413522"   "3448342"   "3473106"   "3505583"   "3509450"   "3531712"   "3532936"   "3534249"   "3541425"   "3548294"   "3571608"   "3588672"   "3668545"   "3697861"   "3771021"   "3819986"   "3881150"   "3886410"   "3916220"   "4016460"   "4075546"   "4186418"   "4423431"   "4429339"   "4459537"   "4536699"   "4618812"   "4661879"   "4691129"   "4725912"   "4736268"   "4752852"   "4835649"   "5006734"   "5015918"   "5136452"   "5233287"   "5319515"   "5381296"   "5410441"   "5430401"   "5506493"   "5513060"   "5519557"   "5539603"   "5539610"   "5625519"   "5642251"   "5757600"   "5814979"   "5815356"   "5946270"   "5991134"   "6118641"   "6424512"   "6456186"   "6587027"   "6611410"   "6710698").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 20:34
S70	88	("3074006"   "3078410"   "3109980"   "3192441"   "3201606"   "3317817"   "3337744"   "3395317"   "3403320"   "3413522"   "3448342"   "3473106"   "3505583"   "3509450"   "3531712"   "3532936"   "3534249"   "3541425"   "3548294"   "3571608"   "3588672"   "3668545"   "3697861"   "3771021"   "3819986"   "3881150"   "3886410"   "3916220"   "4016460"   "4075546"   "4186418"   "4423431"   "4429339"   "4459537"   "4536699"   "4618812"   "4661879"   "4691129"   "4725912"   "4736268"   "4752852"   "4835649"   "5006734"   "5015918"   "5136452"   "5233287"   "5319515"   "5381296"   "5410441"   "5430401"   "5506493"   "5513060"   "5519557"   "5539603"   "5539610"   "5625519"   "5642251"   "5757600"   "5814979"   "5815356"   "5946270"   "5991134"   "6118641"   "6424512"   "6456186"   "6587027"   "6611410"   "6710698").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 20:34
S71	10	("20030080719"   "5416885"   "5629680"   "5945745"   "6175225"   "6229279"   "6320358"   "6384489"   "6455951"   "6574122").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 20:36
S72	2	("6781502").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/09/19 20:36

## EAST Search History

S73	88	("3074006"   "3078410"   "3109980"   "3192441"   "3201606"   "3317817"   "3337744"   "3395317"   "3403320"   "3413522"   "3448342"   "3473106"   "3505583"   "3509450"   "3531712"   "3532936"   "3534249"   "3541425"   "3548294"   "3571608"   "3588672"   "3668545"   "3697861"   "3771021"   "3819986"   "3881150"   "3886410"   "3916220"   "4016460"   "4075546"   "4186418"   "4423431"   "4429339"   "4459537"   "4536699"   "4618812"   "4661879"   "4691129"   "4725912"   "4736268"   "4752852"   "4835649"   "5006734"   "5015918"   "5136452"   "5233287"   "5319515"   "5381296"   "5410441"   "5430401"   "5506493"   "5513060"   "5519557"   "5539603"   "5539610"   "5625519"   "5642251"   "5757600"   "5814979"   "5815356"   "5946270"   "5991134"   "6118641"   "6424512"   "6456186"   "6587027"   "6611410"   "6710698").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/19 20:36
S74	20	((fet or mosfet or gate or transistor\$1 or switch\$3) near3 (first or second)) same parallel and zener near gate	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/20 17:23
S75	13	((fet or mosfet or gate or transistor\$1 or switch\$3 or semiconductor) near3 (microcomputer or controller or control or processor or microprocessor or microcontroller)) same parallel and zener near gate	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/20 17:26
S76	106	zener near gate	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/20 17:27
S77	8	S76 and fuse	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/20 17:30
S78	3	("6710698").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/09/20 17:30
S79	10	("20030080719"   "5416885"   "5629680"   "5945745"   "6175225"   "6229279"   "6320358"   "6384489"   "6455951"   "6574122").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 17:30
S80	1	("6710698").URPN.	USPAT	OR	ON	2006/09/20 17:31